

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (previously amended): A computer implemented method of providing a user with an assessment of a gemstone having a cut shape, the method including the steps of:

a computer receiving at least three objective parameter values from the user relating to measured physical proportions of the gemstone, said values selected from the group comprising depth percentage, table percentage, crown angle, crown percentage, pavilion angle, pavilion percentage, culet percentage, girdle thickness, or other analogous physical proportion parameters applicable to the cut shape of the gemstone;

the computer determining attribute values for a plurality of attributes of the gemstone contributing to visual appeal, including one or more of the following: brilliance, fire, scintillation, and diameter spread; wherein each said attribute value is determined by:

selecting at least three of the received objective parameter values; and

combining the selected objective parameter values to determine the said attribute value on the basis of predetermined consumer preferences that have been established taking into account the effect, upon the corresponding attribute contributing to visual appeal, of an inter-relationship amongst all of the selected objective parameter values;

wherein the step of determining includes retrieving said values of attributes contributing to visual appeal from one or more lookup tables indexed by the selected at least three objective parameter values;

the computer establishing a rating value of the gemstone based upon said values of attributes contributing to visual appeal; and

the computer providing to the user an assessment of the aesthetic characteristics of the gemstone relative to said predetermined consumer preferences based upon said rating value and/or said values of attributes contributing to visual appeal.

Claim 2 and 3 (canceled)

Claim 4 (previously presented): Method of claim 1 wherein the step of establishing a rating value includes applying an adjustment to one or more of the values of attributes contributing to visual appeal and/or the rating value in accordance with one or more of the following:

- (i) vertical spread;
- (ii) table size;
- (iii) girdle thickness;
- (iv) culet size;
- (v) half facets;
- (vi) symmetry;
- (vii) polish.

Claim 5 (canceled)

Claim 6 (previously amended): Method of claim 1 wherein the gemstone assessment includes a description of the visual appearance of the gemstone based upon the determined values of attributes contributing to visual appeal and/or the established rating value.

Claim 7 (previously amended): Method according to claim 1 wherein the gemstone is a diamond.

Claim 8 (previously amended): Computer program product including a computer usable medium having computer readable program code embodied on said medium for providing a user with an assessment of a gemstone having a cut shape, said computer program product further including computer readable code within said computer usable medium for:

receiving at least three objective parameter values from the user relating to measured physical proportions of the gemstone, said values selected from the group comprising depth percentage, table percentage, crown angle, crown percentage, pavilion angle, pavilion percentage, culet percentage, girdle thickness, or other analogous physical proportion parameters applicable to the cut shape of the gemstone;

determining attribute values for a plurality of attributes of the gemstone contributing to visual appeal, including one or more of the following: brilliance, fire, scintillation, and diameter spread; wherein each said attribute value is determined by:

selecting at least three of the received parameter values, and

combining the selected objective parameter values to determine the said attribute value on the basis of predetermined consumer preferences that have been established taking into account the effect, upon the corresponding attribute contributing to visual appeal, of an inter-relationship amongst all of the selected objective parameter values;

wherein the computer program product includes one or more lookup tables of values of attributes contributing to visual appeal embodied on said computer usable medium, and wherein the computer program product further includes computer readable code within said computer usable medium for, in the step of determining, indexing said lookup tables using the selected at least three objective parameter values to retrieve the derived values of attributes contributing to visual appeal;

establishing a rating value of the gemstone based upon said values of attributes contributing to visual appeal; and

providing to the user an assessment of the aesthetic characteristics of the gemstone relative to said predetermined consumer preferences based upon said rating value and/or said values of attributes contributing to visual appeal.

Claims 9 and 10 (canceled)

Claim 11 (previously presented): Computer program product of claim 8 including computer readable code within said computer usable medium for applying an adjustment to one or more of the values of attributes contributing to visual appeal and/or the rating value in accordance with one or more of the following:

- (i) vertical spread;
- (ii) table size;
- (iii) girdle thickness;
- (iv) culet size;
- (v) half facets;

- (vi) symmetry;
- (vii) polish.

Claim 12 (canceled)

Claim 13 (previously presented): Computer program product of claim 8 including computer readable code within said computer usable medium for providing the user with a description of the visual appearance of the gemstone based upon the determined values of the attributes contributing to visual appeal and/or the established rating value.

Claim 14 (previously presented): Computer program product according to claim 8 wherein the gemstone is a diamond.

Claims 15 - 21 (canceled)

Claim 22 (previously presented): Method of claim 1 wherein entries in the lookup tables are predetermined values computed using a computer software program for performing virtual diamond analysis.

Claim 23 (previously presented): Method of claim 1 wherein entries in the lookup tables are predetermined values obtained by analyzing actual diamonds.

Claim 24 (previously presented): Method of claim 1 wherein the step of determining includes computing said values of attributes contributing to visual appeal from a virtual model of a diamond corresponding with the received objective parameter values using a computer software program for performing virtual diamond analysis.

Claim 25 (previously presented): Method of claim 1 wherein the rating value is established by summing the values of attributes contributing to visual appeal.

Claim 26 (previously presented): Method of claim 1 wherein the gemstone assessment includes a numerical value corresponding with the rating value.

Claim 27 (previously presented): Method of claim 1 wherein said objective parameter values are received electronically over a telecommunications network link.

Claim 28 (previously presented): Method of claim 27 wherein the telecommunications network is the internet.

Claim 29 (canceled)

Claim 30 (previously presented): Computer program product of claim 8 wherein entries in the lookup tables are predetermined values computed using a computer software program for performing virtual diamond analysis.

Claim 31 (previously presented): Computer program product of claim 8 wherein entries in the lookup tables are predetermined values obtained by analyzing actual diamonds.

Claim 32 (previously presented): Computer program product of claim 8 including computer readable code within said computer usable medium for, in the step of determining, performing a virtual diamond analysis to compute said values of attributes contributing to visual appeal from a virtual model of a diamond corresponding with the received objective parameter values.

Claim 33 (previously presented): Computer program product of claim 8 including computer readable code within said computer usable medium for establishing said rating value by summing the values of attributes contributing to visual appeal.

Claim 34 (previously amended): A system for providing a user with an assessment of a gemstone having a cut shape, the system including:

input means for receiving at least three objective parameter values from the user relating to measured physical proportions of the gemstone, said values selected from the group

comprising depth percentage, table percentage, crown angle, crown percentage, pavilion angle, pavilion percentage, culet percentage, girdle thickness, or other analogous physical proportion parameters applicable to the cut shape of the gemstone;

means for determining values for a plurality of attributes of the gemstone contributing to visual appeal, including one or more of the following: brilliance, fire, scintillation, and diameter spread;

the determining means being configured to determine each said attribute value by:

selecting at least three of the received objective parameter values; and

combining the selected objective parameter values to determine the said attribute value on the basis of predetermined consumer preferences that have been established taking into account the effect, upon the corresponding attribute contributing to visual appeal, of an inter-relationship amongst all of the selected objective parameter values;

wherein the determining means includes a means for retrieving said values of attributes contributing to visual appeal from one or more lookup tables indexed by the selected at least three objective parameter values;

means for establishing a rating value of the gemstone based upon said values of attributes contributing to visual appeal; and

output means for providing to the user an assessment of the aesthetic characteristics of the gemstone relative to said predetermined consumer preferences based upon said computed rating value and/or said values of attributes contributing to visual appeal.

Claim 35 (currently amended): System of claim 34 wherein the input means comprises a computer input device for the user to enter said plurality of objective parameter values, and the output means comprises a computer display device for displaying the ~~gem-stone~~ gemstone assessment to the user.

Claim 36 (previously presented): System of claim 34 wherein the input means and output means include means for receiving the objective parameter values from the user and for transmitting the gemstone assessment to the user over the internet.

Application Serial No. 09/883,561  
Amendment dated May 16, 2007  
Reply to Notice of Allowance dated March 27, 2007

Claim 37 (previously presented): System of claim 34 wherein the input means includes an interface with a diamond proportion measuring device for receiving proportional parameters of a diamond measured by said measuring device.

Claim 38(previously presented): Method of claim 1 wherein establishing the rating value includes applying a corresponding numerical weighting to each of said values of attributes contributing to visual appeal, and summing the weighted attribute values.

Claim 39 (canceled)